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Society Affairs

A Record of the Current Activities of the Society, Its Members,
Council, Committees, Sections and Student Branches ;
and Affairs of Interest to the Membership



THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
29 West 39th Street, New York

SOCIETY AFFAIRS

Affairs of Interest to the Membership—Secretary's Letter—New Policy of Society Awards—Among the Local Sections—Important Student Branch Recommendations—Addresses of Members Required—Employment Bulletin—Candidates for Membership

The Secretary's Letter

"THIS Society is not great for what it does, but for what it helps others to do." These were the words of Mr. Ambrose Swasey, Honorary Member and Past-President of the Society, on the occasion of his last visit to the rooms of the Society. Whenever he is in the vicinity of New York, Mr. Swasey never fails to come in and give us all a kindly greeting.

This is the spirit of the whole Society—to render service to others. It is the spirit that actuates an engineer to become a member, so that through the Society he may in some manner contribute his talents to the advancement of the engineering profession. Mr. Swasey, and other good friends, usually ask, "What is new?" indicating their ever-readiness to serve.

The news this month is that Mr. Charles LeMaistre, Secretary of the British Engineering Standards Association, is in the United States at the invitation of the American Engineering Standards Committee; and the latter organization, joined by the officials of the Engineering Societies and representatives of the departments of the Government, the commercial world and the Navy, tendered Mr. LeMaistre a complimentary dinner. On this occasion he gave an address on Standardization, coupled with a statement of the work of the British Engineering Standards Association. I feel that the Engineering Societies can contribute directly to the stabilizing of the world in no better way than by standardization of product. Further, that in order for the United States to maintain its industrial supremacy against the sharp competition which is sure eventually to come, we must standardize both method and product so that we will still, with highest wages, be able to produce at lowest cost.

Another matter of interest was the reception, attended by 1200, to Mr. Herbert Hoover who recently arrived from abroad, an account of which appears in this number. This was absolutely non-political and solely under the auspices of the American Institute of Mining and Metallurgical Engineers to a fellow engineer who has brought great credit to the profession by his most efficient and unselfish devotion to the cause of humanity.

One of the gratifying developments of the Society's work is the increase in use of the Library by the members who live at a distance. The Library service has doubled and even trebled during the last few years, and we are prepared to render still greater service by the re-cataloguing which is now in progress.

We are developing still further both the quality and quantity of the indexing in the Engineering Index. One member stated that he regarded this compilation as a dictionary and consulted it continuously. We want every member to get the full benefit of the extraordinary service which we are trying to render; and inasmuch as it is being conducted with a large staff and at great expense, we are especially grateful for any suggestion as to how the service can be improved.

One of the new developments is the membership of the Society in the National Industrial Conference Board. The President of the United States addressed this Board first in his letter calling for a Labor Conference in Washington on the 6th of October. The Society intends, through its Council and its representatives on the National Industrial Conference Board, to assume its responsibilities and obligations in helping to solve the problems of industry which are just as much essential to successful production as proper designing and are strictly within the engineering purview of the Society. In order that the whole membership may get the benefit of the remarkable publications of the committees of this Board, a special department will shortly be inaugurated in MECHANICAL ENGINEERING. So important are these publications in regard to the research work of the National Industrial Conference Board that no one concerned in industry

can afford not to read them and to post himself on the facts determined.

The President has devoted an extraordinary amount of attention to reconstituting and appointing new committees for conducting the Society's work and has been grateful for the offers of assistance which he has received from the members. He is, however, still hopeful that more members will continue to send in their names as available for committee appointments as there are several pieces of important work yet to be undertaken.

CALVIN W. RICE,
Secretary.

New Policy on Society Awards

THE Council has had under consideration for some time the advisability of extending the policy inaugurated in the revision of the Junior and Student prizes for meritorious papers. The granting of awards is a common practice with learned societies and furnishes a legitimate and valuable means of encouraging production of good work.

With the view of formulating a definite policy which the Society might well pursue in this connection, the Council charged the special Committee on Relations with Colleges to practice of other societies and to make recommendations. This the Committee did and presented its report to the Council and the report was ordered printed. The recommendations follow:

TO THE COUNCIL OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS,
GENTLEMEN:

The Committee on Relations with Colleges, acting as a special Committee on Awards, desires to place before you the following brief statement accompanied by certain recommendations for the purpose of offering a more consistent and ample recognition of service to the profession and to the country by engineers, especially by those who are members of our Society.

At present we have several awards.

The first and most important is the Honorary Membership voted to eminent engineers for service to the profession.

The second is Life Membership which has occasionally been voted for excellence of work.

The third is a Junior Prize awarded for the best paper by a junior member of the Society.

The fourth is in the form of prizes for student branch members for the recognition of good papers.

There is a possible fifth in a medal to be awarded from the income of a bequest by Rear Admiral George W. Melville, formerly president of our Society. The dies for this have not been provided and it will require some years to accumulate from the income sufficient to make this medal available.

The Society also shares in the award of the John Fritz Medal by the appointment of four members of a board having administration of the fund and the medal.

It will be observed that these are not very systematic and that they do not cover the whole subject of awards and medals for the encouragement of good work as fully as our Society would approve. Members have suggested from time to time that suitable recognition for service to the profession and to the industries of the country would offer greater inducement towards activity and would thus be fruitful of benefit to modern society. We have constantly laid stress on the increase of membership as a means towards enlarging our field and our service to the public and of recent years much effort has been expended through our Committee on the Increase of Membership so that the numbers have almost doubled during this great world crisis. Through this increase of membership, through a broader policy as to business, and as to human relations of our Society with the whole country, the income of the Society has grown enough to make it pre-eminent in its resources.

The question then is very properly raised: Are we doing all that is possible both for the benefit of our members and towards a greater stimulus to good work? Should not some of the increased annual income be expended towards the production of valuable papers submitted at the conventions, towards the encouragement of student ac-

tivity, towards better service on the part of all engineers and towards the broadening out of our whole profession?

It is common experience that the income of all societies and institutions fluctuates from year to year and that while we are prosperous today changes may come to reduce our income and render us less able to carry out expensive awards. Consequently, it would be better to have the recognition in the nature of medals or awards provided by gift and bequest to the Society. Some of the foreign societies have paid considerable attention to this form of benefaction. Such awards should not be expensive as it is the recognition far more than the actual intrinsic value of anything given to a member that renders it acceptable and stimulating. It would be possible occasionally to set aside a fund, the income from which would be devoted to some award named in honor of a distinguished member of our Society. Such action, and the gifts that might follow a well-recognized system of award, would gradually accumulate the endowment funds for all such purposes.

Our association has always been an education and a friendship Society and the chief thought of the founders seems to have been the exchange of information for the purpose of enabling the members to do their work better. It is perfectly proper that there should be the thought of personal advancement as well as of benefit to the public in the mind of all who join. We cannot ask members to come into the Society simply on the basis of what they can do for others unless there is some reward. As young men they must make a living and it is right that they should be assisted, both by friendly help in obtaining employment and by cordial recognition for good service rendered to the profession. We have at the present time benefit from papers and from the wider acquaintance that springs from attending the annual meetings.

In the first place, there is MECHANICAL ENGINEERING, the Journal which has become an important engineering periodical.

In the second place, there is the Year Book, containing the names and addresses of not less than 10,000 men interested in mechanical engineering.

In the third place, THE ENGINEERING INDEX, which is issued annually, gives brief descriptive data on all important articles appearing in the technical press.

In the fourth place, a Condensed Catalogue of the mechanical equipment in the United States is supplied to every member.

In the fifth place, the library in the Engineering Building is brought within reach of every engineer, wherever he may be, through the service bureau that will search and translate from original papers anything desired by the members.

In the sixth place, the Society acts as an employment office for all members who are seeking professional opportunities. It has rendered a large service in this respect.

In the seventh place, the Society rooms are freely used as meeting places for members who go to New York.

This is no attempt to list all the benefits to members who join the Society. They will always get their principal gain through increased acquaintance and through the outlook afforded by the large meetings and also through the information given in the published papers. Up to this time, however, there has been comparatively little interest in recognizing through awards and medals the achievements of engineers.

The desire for approval on the part of his colleagues is one of the strongest motives that can actuate any human being. It is more powerful, even, than the instinct of self-preservation because the individual who gains in a large measure the respect of his fellowmen is stimulated to wider service while he who has lost their respect is broken down both professionally and morally. The finest title to fame comes from the approval of one's own profession and from the fellow members of a great society. Those who have a professional knowledge of the work that we have done have the right to give us the larger encouragement to better work. The Council of The American Society of Mechanical Engineers has done well to raise this whole question, especially during this reconstruction period when we are all hoping the world is going back to a condition of permanent peace under which a better day will dawn. Philosophic writers have called attention many times to the plain question as to how humanity may find in time of peace that developing struggle in which all sound, healthy men delight to engage, thereby building up the mental and physical strength of a future generation and thereby promoting the many virtues that are found in war. It is a certain generous spirit of emulation that we are seeking to promote and with it those virtues, sometimes called the savage virtues, that grow upon the battlefield, truth and loyalty, devotion to a cause and the willingness to sacrifice life, even to the extent of throwing one's body in the way of a despoiler of ideals. We want, in our Society, these savage virtues and we want our members to know that we recognize them when we see them.

At the present time a member finds his chief satisfaction in the work done and in the commendation of a few friends. Even so striking an illustration of excellent service as that of the Boiler Code Committee has up to this time had no form of public encouragement from our Council or our Society. We have approved the work of the committee and we have invariably assisted them in their interpretation, but notwithstanding the fact that many states have by legislative enactment recognized the value of this committee's work,

we of the Society have made little or no public acknowledgement. The war has undoubtedly stimulated active thought in this direction. The service of our members in the field and in the training camps has caused us to think more acutely on the whole subject of recognition for good work. Many of our members have gone into service at a financial and physical sacrifice to themselves in the hope of being able to do their full share towards bringing victory to our country. The time is ripe then for generous recognition to men who have served both in peace and in war.

On December 3 it was voted by the Council of The American Society of Mechanical Engineers to approve the establishment of some order of merit and to appoint a committee to study the whole subject towards making a better society. In the meantime the Committee on Student Branches has been changed to be called the Committee on Relations with Colleges and the matter was committed to them as a special committee. This simply means that the Committee has been directed to make a study of the subject and make a full report on the whole general question as to encouragement to better work in our Society and to suggest to the Council some definite action in the shape of awards and encouragements to members of the Society. While this movement seems like breaking new ground, as a matter of fact it is following along behind many societies. In the appendix of this report there will be found information with regard to awards, in part taken from a book published by the Carnegie Institution in Washington, and in part from the year books of American societies. The by-laws are given for some awards to assist in a better statement for our own Society.

It is interesting to note that some of the foreign societies have gone very much farther than any American societies, except perhaps, the Franklin Institute, towards endowments for profession recognition. The Institute of Civil Engineers of Great Britain has endowment funds which amount to £32,353, presented to them through bequests and gifts. Every fund is named and the purpose for which it is given, is specified. The Institute of Electrical Engineers of Great Britain have given, in premiums and scholarships during one year, £680. The Institution of Mechanical Engineers of Great Britain has an endowment given by members and friends of £3,695. The Society of Civil Engineers of France has an endowment exceeding 300,000 francs for awards and other purposes, to stimulate activity in their profession. All of the above amounts can be accepted only as approximate as they represent the practice of a few years ago. They are so far ahead of American societies, however, that the principle established by them can be accepted.

There is a great difference of practice among different societies and in order that the Council may deal with the whole matter intelligently, the by-laws of societies are given in many cases. Attention may well be called to the growing disposition on the part of scientific societies and manufacturers to assist by endowment the establishment of needed funds for the use of societies. Money has been given and all kinds of conditions have been specified for the use of the income.

The most important award in this country is the John Fritz Medal established by the professional associates and friends of John Fritz on August 21, 1902, to perpetuate his memory. The fund is distinctly the gift of a number of men and it is administered by the four founder societies holding the Engineering Societies Building.

The oldest award is probably that given by the American Academy of Arts and Science, the Rumford Award, which had its origin in a gift by Count Rumford. The endowment is \$5,000 and the income is to be used as a suitable premium for discoveries or improvements in heat and light.

It is not necessary here to go into details as they are given in the list of societies that follows as an appendix to this short statement. The whole subject of endowments for awards and other purposes and the votes for stimulating activity and a wider understanding in the profession may be classified along certain lines.

- 1 Honorary Membership voted by governing bodies to men of great distinction in the profession, being in a sense similar to the honorary degree awarded by colleges and universities.
- 2 Life Membership voted by governing bodies or by letter ballot of an entire society for excellent contribution to the literature of the society. This is customarily given only to members who, by their activity, assist in the development of science. The by-laws under which this award is voted in some cases restrict it to those who have not yet established their reputation, presumably on the principle of encouraging younger men to come forward.
- 3 Medals voted for excellent contribution of some kind whether to the literature of the society or to the applications of science. These are given to members and non-members of societies and may cover any department.
- 4 Cash prizes voted for exceptional work in science or as a recognition of excellent progress in some special direction by students in colleges. Such prizes sometimes accompany medals or life membership for excellent contributions to literature.
- 5 Cash awards voted for the conduct of research and given to men of exceptional promise, or to men who have shown by research already partly completed the value of continuing their work and bringing it to a successful conclusion.
- 6 Fellowship voted to enable a student to continue his study or to travel in the interest of his branch of the profession. This is

usually given to men who have graduated from a college or technical school and is looked upon as graduate work for which a student must establish his entire fitness to the satisfaction of a board.

7 Scholarships awarded to students in undergraduate departments of colleges. These scholarships may be given to young men of exceptional promise for special theses along any line connected with the engineering profession, or for first-rate work along some other lines in colleges. They amount to cash prizes.

8 Honorable mention by some governing bodies for contributions to the literature or to the applications of science.

9 Some special kind of button or insignia that can be worn by men who have been commended by the Society or by student members who have joined one of the college branches.

10 Assistance out of a benevolent fund raised from the whole membership to take care of our brothers in distress or of their families. This does not exactly belong to the type of award under consideration but it should be mentioned here as a means of calling attention to a direction in which the British societies excel.

11 A recognition of efficient service in the education of young men for the profession by the establishment of lectureships, possibly travel lectureships, for the benefit of the profession. A good example of this is found in the James Forrest Lecture and Medal Fund of the Institution of Civil Engineers of Great Britain.

In taking up the establishment of some awards by our Society certain fundamental ideas should be kept in mind. The main purpose of such recognition is to establish a cordial air of good fellowship on the part of all members of the Society towards those who have done work out of the ordinary. Every member who presents a paper should know that it is going to be part of his record as an engineer and that where high merit is exhibited, it will obtain speedy recognition from his colleagues. That is the only stimulus that we can give for good papers. Besides this every engineer in our Society who is engaged in manufacturing should know that any marked improvement in the arts would also have quick recognition by the entire Society. There are two ideas that accompany every award. One is the encouragement to the profession by telling them that there is at least one place where something besides money counts. In general we must keep in mind that it is the younger men who need encouragement and consequently our awards should be recognition in some public way for the service rendered, first by men of established reputation, and second, by young men who have presented excellent papers or have opened the way to greater advances in manufacture. There ought to be prizes not open to eminent men. Any recognition voted by the Council for service to the public, to the profession, or to the Society itself should be given at one of the general meetings and should be published in the Journal. We have too great a tendency to pass over in silence the work of our colleagues, taking for granted that the work itself is a suitable reward. In that way our Society loses something, perhaps a tangible something, in its relation to the whole country. At present there is a supposition on the part of Western members that it is a New York or Eastern aggregation. Nothing could be further from the truth; nevertheless, the Council should take every opportunity to combat the belief that men remote from headquarters cannot get quite the same benefits and the same recognition, but it should be quick to call attention to the good work of any member, however remote from headquarters he may be.

The effort of President Cooley, to distribute the membership of committees over the whole country and to call into service the members who have not heretofore been available, can be strengthened and reinforced by suitable recognition to any man who has served eminently. The membership in a local section should be encouraged to call attention to the work of engineers in their section and to nominate for appropriate recognition the best men in their societies. It may be that in limiting the choice to only a few individuals every year, so that our awards may not become too cheap, we shall have to deny candidates suggested by sections or to postpone their consideration. Under all circumstances a committee of the society will no doubt be able to justify its action.

The two meetings where this public recognition can be given are general and the Meetings Committee should plan such interesting events definitely on the program. The general Annual Meeting in December might be limited to Honorary Membership, to Life Membership and to medals for service of very great distinction. The Spring Meeting might be set apart for recognition of the best papers of the year even to the extent of awarding Life Membership and to the award of prizes and scholarships. This is merely by way of suggestion as the important consideration about the whole business is dignified publicity.

The following recommendations are offered to the Council for action with the understanding that if they are approved, in part, or as a whole, they will be placed before the Committee on Constitution and By-Laws for elaboration into a working system.

1 Honorary Membership voted by the Council as at present in accordance with the Constitution of the Society.

2 Life Membership for the best contribution to the literature of MECHANICAL ENGINEERING to be found in the papers for one year.

3 A Medal for some notable invention or some striking improvement in connection with the industries.

4 Honorable Mention for notable contribution to engineering, either of a practical nature or in literature.

5 Scholarships or Fellowships for exceptional attainment in college work.

6 A Medal or special mention for notable work by Junior members and by students.

The administration of this whole matter should be placed in the hands of a committee for recommendation to the Council. All the sections and the individual members of the Society should have attention called to this departure of the Council from the practice in regard to awards. Any member should feel free to submit the name of an associate or member of the Society for consideration if he has rendered notable service of some kind. The local section in every state of the union should feel it part of its duty to bring before the committee full information with regard to notable achievements of any member.

(Signed) IRA N. HOLLIS, *Chairman*
JOHN R. ALLEN
J. W. ROE
GUIDO M. MARX.

Among the Local Sections

CHICAGO:

September 30. City Zoning as pertains to the requirements for residential and manufacturing districts, by Mr. Whitten, Chairman, Zoning Committee, Cleveland, O.

CLEVELAND:

September 9. All day meeting.

10.00 A. M., The Trackless Train for Moving Materials (Illustrated with motion pictures).

11.00 A. M., Engineering Problems of Cleveland's Rapid Transit Development.

2.00 P. M., Inspection trip by special train, the first over the New Rapid Transit Line, stopping at the Shaker Heights Club for luncheon.

6.00 P. M., Dinner at Hotel Cleveland. Noted Hydro-Electric Developments in Italy and South America (Illustrated), by O. M. Smart, specialist in hydro-electric engineering, detailed by the U. S. Government to investigate the recent water power progress made in the Italian Alps.

8.00 P. M. Pertinent address on a phase of the problem of capital and labor by Dr. Willis A. Moore.

September 30. The Engineer's Place in Safety Work by L. A. DeBlois, Engineer of the E. I. DuPont deNemours Company, Wilmington.

COLORADO:

September 13. Dean Charles Russ Richards, member of the Committee on Local Sections, attended an informal dinner meeting at the Shirley Hotel, Denver.

NEW YORK:

September 17. Industrial Unrest, by Dr. Wm. M. Leiserson, formerly Chief, Division of Labor Administration, Working Conditions Service, U. S. Department of Labor.

Committee on Aims and Organization

It is just one year since announcement was first made in these columns of the appointment of a special Committee to "discuss and formulate the aims of the Society in the light of modern development and present-day thought, and to assist towards finding a method of co-operation with the rest of the engineering profession to carry out these aims." The Committee has been actively at work during this period of time and as the situation now stands, it will present its final recommendations to the Council in ample time for passage by that body for presentation to the Society as a whole at the forthcoming Annual Meeting.

Meanwhile, the other Founder Societies having had similar committees at work, and there having been appointed a Joint Committee on Development to discuss those features of the respective reports of the Committees which are of interest to all, the Joint Committee has been holding meetings and is expected to report back to each of the Societies very soon, and its report will, therefore, be received by our Society about the same time that our own Committee has its final report in shape. Therefore, at the time of the Annual Meeting our membership will have an opportunity to discuss the recommendations of our special Committee on future policy in our internal affairs and also on future policy in our relationships with the Founder Societies through the various joint activities.

Important Student Branch Recommendations

Before the war, the Society maintained active connection with a number of the leading engineering colleges throughout the country through the medium of its forty odd Student Branches; but with the changed conditions in the colleges induced by the war, this activity suffered somewhat; and to revive the activity the Council recently created a special Committee on Relations with Colleges which was requested to investigate Student Branch requirements and to recommend a policy for the conduct of Student Branch Work.

The report of the Committee was presented to the Council and was received and ordered printed in MECHANICAL ENGINEERING. The recommendations follow:

TO THE COUNCIL OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS,

GENTLEMEN:

Your Committee on Relations with Colleges begs to submit the following report and recommendations:

The ineffectiveness of our relations with colleges seems due to lack of definite program, a failure in coördination between the parent Society and the student branches, and a resultant reliance upon the initiative of a few individuals whose interest fluctuates from year to year.

While nothing should be done to disturb the present autonomy of the student branches we would recommend an addition to the By-Laws as follows:

Each student branch shall annually elect one of its members to serve as Corresponding Secretary. He may receive a nominal remuneration and expense account from the Society. His duties shall be those ordinarily attached to such a position and in addition thereto he shall be responsible for the maintenance of records and serve as channel of communication with the parent Society.

In this way there will be established a tangible official connection through which suggestions from the Society may be made leading toward continuity of policy and interest. In pursuance of this plan a further addition to the By-Laws as follows would be desirable:

The Society shall issue every spring a syllabus or suggestion of some one subject or subjects, for consideration for the following year.

It is understood that this is to be done merely by way of helpful advice or guidance and involves no element of dictation, but on the contrary that individual initiative on the part of the branches is to be vigorously encouraged.

At present the activities of the student branches—while no two colleges have exactly the same methods—may be grouped under the following heads:

1 To get outside lecturers on technical subjects.

2 To get outside lecturers on non-technical subjects.

3 To get salesmen or agents from manufacturers to describe their product, usually illustrating with a stereopticon.

4 To obtain lecturers on general subjects from members of the general faculty with which the engineering department is connected.

5 To encourage students to speak on their feet in public meetings (a) by giving them the periodicals and books to be reviewed orally. (b) by having the results of theses, investigations, and technical work conducted by the student, described. (c) by the delivery of brief addresses on non-technical subjects.

6 To broaden the contact with engineering by joint meetings with other branches of engineering in the student engineering society.

7 To bring students together, mainly for social purposes and for making them acquainted with the A. S. M. E. and its usefulness to them personally.

8 To teach them initiative by non-interference in the student branches, thus leaving to them all activities outside the classroom.

These are all to be commended. By way, however, of a suggested list of topics (such as contemplated under the proposed By-Law) the following may be enumerated as well worthy today of consideration by a student branch:

1 The general effect of the peace conference and the League of Nations upon the work of the engineer, especially in commercial life of the nation during the next generation.

2 The method by which war disorganizes industries and the work of reconstruction that invariably follows every war. The general reconstruction that must follow this war in all the belligerent countries.

3 Standardization for manufacture and the effect of this in forcing engineers and manufacturers to reduce the number of parts and to simplify construction of all kinds of machines. Standardization for guns and munitions.

4 Conservation of national resources including fuel, water, soil, forests, and minerals.

5 Labor and the complete readjustment of society in order that employer and employee may live together in peace. Examples of the solution of problems in different manufacturing companies.

6 The problems of transportation, national and private ownership, and the changes consequent upon improvements and rapidity of transportation.

In the judgment of your committee it is advisable that time for the activities of the student branch should be taken from the present demands upon the student so that they may not become of the nature of additional courses of study and that credit may or may not be given in accordance with the conditions that prevail in each college. Recognition should in all cases come from the parent Society since this will foster closeness of relationship. It may take the form of an extension of the present system of Student Prizes such as Certificates of Award for these papers which merit recognition even though they fail to win one of the prizes. Gift or loan scholarships may also be provided. The details of this would require knowledge of the funds available and could be worked out by the committee for later recommendation to the Council if the general idea meets with approval.

The Committee submits herewith certain recommendations for consideration and approval of the Council. It may be wise to specify that in approving these resolutions both the Council and the Committee regard them as a tentative method of working out our relations with the education of men for our profession, to be modified and extended as experience proves their effectiveness toward the purpose in view.

1 An addition to the By-Laws as follows:

Each student branch shall annually elect one of its members to serve as Corresponding Secretary. He may receive a nominal remuneration and expense account from the Society. His duties shall be those ordinarily attached to such a position and in addition thereto he shall be responsible for the maintenance of records and serve as channel of communication with the parent Society.

2 An addition to the By-Laws as follows:

The Society shall issue every spring a syllabus or suggestion of some one subject or subjects for consideration for the following year.

3 The authorization of ten scholarships, not to exceed \$200.00 each, to be awarded under rules prepared and administered by the Committee on Relations with Colleges.

4 The setting aside of a fund to be invested in loans for deserving students, to be administered by the committee.

5 The authorization of the necessary expense for sending a representative of the Society to visit student branches, preferably selecting one or more members of the Committee on Relations with Colleges for this service.

6 That the Committee on Relations with Colleges be instructed to encourage co-operation among the different branches of engineering in college as well as among the different student branches in the different colleges.

7 That the Committee on Relations with Colleges be instructed to encourage the students to conduct the affairs of the branch themselves rather than to depend solely upon faculty direction or supervision.

8 That the President of the Society, either personally or through the committee, be requested to confer with the Engineering Societies, looking to co-operative effort in connection with education.

9 That the Local Sections of the society be requested to interest themselves in the student branches within their localities.

10 That the organization of student branches be left with the Committee on Relations with Colleges subject to the approval of the Council.

11 That, so far as it seems advisable and possible, the Society, through its committee, assist the student branches in obtaining from time to time a few good lecturers from the outside.

12 That a student who has done the most effective work in a student branch in his senior year may be elected to junior membership in the society upon graduation by the student branch, and that the society remit the initiation fee and dues for the first year.

13 That the present system of Student Prizes be continued and, if found possible and advisable, extended.

For the Committee,

(Signed) IRA N. HOLLIS,
Chairman.

Technical Men for the Consular Service

For the coming consular examinations the officials of the State Department have expressed their hope that a considerable number of technical men will take the examination. The Department recognizes that the interest of the United States will be served best if technical men are made available, through these examinations, for vacancies where their training will be of value.

Industrial engineers who passed the consular examination would be assigned to industrial centers of Europe or South America. Chemists, mining engineers, mechanical engineers, electrical engineers, etc., would be assigned to industrial centers requiring special training.

The consular examinations will be held in the late fall or early winter, but no definite date has as yet been fixed.

EMPLOYMENT BULLETIN

THE SECRETARY considers it a special obligation and pleasant duty to make the office of the Society the medium for assisting members to secure positions by putting them in touch with special opportunities for which their training and experience qualify them, and for helping any one desiring engineering services. The applications and positions listed below combine the services of the Society and of the Engineering Societies Employment Bureau, Room 1605, Engineering Societies Building.

POSITIONS AVAILABLE

Stamps should be inclosed for transmittal of applications to advertisers; non-members must accompany applications with a letter of reference or introduction from a member; such reference letter will be filed with the Society records.

SALES ENGINEER to have executive charge and direction of sales for manufacturer of steam specialties and valves. Must have had education and experience in general engineering and past record of successful sales management; able to take care of established business and develop new connections. Position requires considerable travelling, to establish personal acquaintance with large users of steam appliances, and ability to meet consulting engineers and purchasing agents of large corporations. Would have one or more assistants as travelling representatives. Must have ability and experience in organization and direction of work but not limited to office duties. Age 35 to 45. Location New York City. R-1369.

MECHANICAL ENGINEER who has had about four years practical experience in power plant designing, installation of piping, heating and ventilating, and machine installation; must be a technical graduate. Location New York City. Salary \$200 to \$300. R-1395.

SALES ENGINEER; must have initiative and energy to sell a new type of tractor wheel. Work at first is in the Middle West. Salary commensurate with ability. R-1398.

SUPERINTENDENT who has had several years actual experience in the manufacture of sprockets and cranes; must be A-1 executive and be able to handle men, and to direct a force of 25 to 60 men. Imperative that he be a native born citizen and it is preferred that he be not over the age of 35. College training preferred but not necessarily essential. Location Indiana. R-1400.

SUPERINTENDENT to have charge of machine shop, erecting shop and foundry, of a plant manufacturing oil and gas burning furnaces. Location Pittsburgh, Pa. R-1404.

STORE KEEPER OR PURCHASING AGENT capable of organizing a store room and getting records in the proper shape and out on time. Location Pittsburgh, Pa. R-1405.

MECHANICAL ENGINEER to act as chief draftsman and superintendent of outside erection. Location Pittsburgh, Pa. R-1406.

SALES MANAGER who has had a great deal of sales experience; preferably man who has practical experience in heat treatment and forging of steel. Location Pittsburgh, Pa. R-1407.

STRUCTURAL STEEL DRAFTSMAN; only men with extensive experience need apply. Several openings. Location Havana, Cuba. Salary depends on experience. New York interview. R-1409.

MECHANICAL DRAFTSMAN with experience on machinery and in the design of fixtures, gages and tools. Openings for two or three men. Location New York State. R-1412.

MECHANICAL ENGINEER AND DRAFTSMAN who has had practical shop experience with lithographic presses, and other machinery used in a large lithographic plant. Location New York State. R-1414.

DETAILER AND REFRIGERATION ENGINEER; experienced as refrigerating engineer, having operated a cold storage plant. Location New York State. R-1420.

DESIGNER experienced in heating and ventilating engineering and having some power

plant and piping layout experience; must be willing to do board and field work. Location New York City. R-1421.

SUPERINTENDENT OF CUTLERY PLANT; mechanical engineer with steam experience in the manufacturing line. Location Wisconsin. R-1428.

STRUCTURAL STEEL DRAFTSMAN; must have had experience in detailing of structural steel work and must be capable of designing bridges and buildings under the direction of the office engineer. Position permanent. Location Pennsylvania. R-1434.

GRADUATE ENGINEER with few years practical experience in one of the basic industries, i. e. metal, wood, rubber or textile; must be conversant with time study work as well as various systems of remuneration, and must be capable of writing reports on industrial conditions as found during the diagnosis investigation. Good appearance is essential. Location Cleveland, Ohio. R-1437.

GRADUATE MECHANICAL, ELECTRICAL OR CIVIL ENGINEERS; preferably with one or two years of technical experience. Must be technical graduates. This position is with a large industrial corporation. Location New Jersey. R-1438.

MECHANICAL DRAFTSMAN competent to assist designing engineer. State full details as to experience, education, nationality, salary expected. Location Indiana. R-1439.

SUPERINTENDENT with general factory production experience for superintending factory manufacturing small intricate parts. Two openings. Location New York City. R-1440.

CONSTRUCTION ENGINEER experienced in building construction with general experience in mechanical and electrical engineering layouts; must be familiar with power plants, piping layouts and cables. Location Ohio. R-1444.

STRUCTURAL DRAFTSMEN with several years experience. Three openings. Location Hastings-on-Hudson, N. Y. Salary \$35 to \$45 per week. R-1446.

RECENT GRADUATE, as assistant to superintendent of power; technical graduate of 1918 or 1919 in mechanical engineering preferred. Location Massachusetts. R-1450.

INSTRUCTOR IN SHOP WORK; good knowledge of the fundamental operations on the common tools, to do machine work; also some knowledge of foundry, pattern making and forging. Not necessary to be technical graduate. Work will begin early in September. Location New York City. R-1453.

RECENT GRADUATES in mechanical engineering for positions in South America. Good location. Salary \$125 per month. R-1456.

MECHANICAL DRAFTSMAN, must thoroughly understand machine design. To do some designing and detail work both on small and large parts and on recovering machinery. Several openings. Location New Jersey. R-1457.

EFFICIENCY ENGINEER familiar with building construction. Location Akron, Ohio. R-1458.

OFFICE MANAGER; familiar with materials, to check up blue prints, take off quantities, handle correspondence, and have general charge of engineering department work. Location Akron, Ohio. R-1460.

INSTRUCTOR IN ENGINEERING to teach steam engineering and power plant design in

a technical institution. Location Massachusetts. R-1461.

INDUSTRIAL ENGINEER to do work in conjunction with an architect laying out equipments under the direction of a company's superintendent and mechanical engineer. Preferably a man who has had experience as chief draftsman in one of the larger construction companies of New York and Boston. Location New York City. R-1462.

CHIEF DRAFTSMAN to take charge of engineering departments; duties are to design all types of washing and ironing machinery, drying room tumblers, etc. Must be about 40 years of age, and have had experience along similar lines. Location Chicago, Illinois. R-1463.

AUTOMOTIVE ENGINEER; young man who is well posted on automobile engineering practice who is capable of systematizing office records and making detailed drawings for parts on machinery as well as giving advice in the best and latest equipment that is offered in automobile shop practice. Location Illinois. R-1464.

CHIEF DRAFTSMAN experienced in the manufacture of heavy machinery. Location Pennsylvania. R-1466.

CHIEF ENGINEER to have charge of a plant manufacturing heavy machinery. Location Pennsylvania. R-1467.

MECHANICAL DRAFTSMAN with machine designing experience. Three or four openings. Location Pennsylvania. R-1469.

SALES ENGINEER to sell power plant equipment; must be technical graduate and have had sales and combustion experience. Company furnishes an automobile and a drawing account. Location Philadelphia. R-1469-a.

TRAINED MECHANICAL ENGINEER with a knowledge of machinery and small parts. Preference will be given to the man who is particularly qualified from the purely technical side. The use of a good deal of higher mathematics will be necessary in this work. The man selected for this position may be teaching in one of our technical schools, or he may be in a position where commercial limitations are set on his technical development. The opportunity offered is that of assistant to the head of the Engineering Division of a large corporation selling to the machinery field. Location New York City. Salary depends on man. R-1470.

ASSISTANT CHIEF ENGINEER for position with a steel manufacturing concern. Location Akron, Ohio. R-1471.

MASTER MECHANIC; must have had extensive experience in manufacturing steel products and punch and die work. Location Akron, Ohio. R-1473.

MECHANICAL DRAFTSMAN who has had experience in sheet mill power plant work desired. Excellent opportunity for the right man. Location Edgewater, New Jersey. Salary depends on man. R-1474.

TESTING AND INSPECTION ENGINEER, must be graduate engineer who has had experience in testing and inspection for a large testing laboratory. The man to handle the work must have a pleasing personality and be familiar with business methods all in addition to testing and inspection business. Good opportunity for advancement. Location Seattle, Washington. R-1475.

PUBLIC UTILITY MANAGER to manage electric light and water works company; must have had experience in the management of

public utilities. Man between 35 and 40 years of age preferred. Location Texas. R-1479.

CHIEF DRAFTSMAN to take responsible charge of the designing and drafting end of engineering department. Must have had extensive experience in the design of plants, especially those related to the chemical industry. Must be familiar with both structural steel and concrete work. Will also be required to deal with clients from time to time and must possess the character and personality required to meet men standing high in their profession. Man about 30 to 35 years of age preferred. Location Massachusetts. Salary depends on experience. R-1482.

HIGH GRADE WORKS MANAGER wanted by a large and well established automobile company; must be thoroughly competent and experienced in general engineering and plant maintenance, must be energetic; exceptional managing abilities required. Application should be complete as to details, and business references, also should be accompanied by photograph if convenient. Position offers exceptional opportunities for the right man. Location Michigan. Salary depends on experience. R-1483.

ASSISTANT TO WORKS MANAGER; several capable assistant works engineers wanted by a large automobile company. Application should be complete as to details and business references, also should be accompanied by photograph if convenient. These positions offer exceptional opportunities for the right men. Location Michigan. Salary depends on experience. R-1484.

COMBUSTION ENGINEER; 25 to 45 years of age, for research and development work; must possess tact and personality; and must be prepared to take a financial interest in the company. Location New York City. R-1485.

FACTORY EXECUTIVE who has had experience in melting of brasses and bronzes in oil fired reverberatory furnaces. Location New Jersey. R-1487.

MECHANICAL ENGINEERING INSTRUCTORS; openings for two recent graduates. Location Pennsylvania. R-1489.

PRODUCTION ENGINEER; technical graduate with 2 or 3 years' experience in production or general manufacturing methods, to fill position with progressive manufacturer of small tools. Position is one which offers fine opportunity to right man. Location Connecticut. R-1490.

CHIEF DRAFTSMAN; must have had experience designing screw thread machines. Location New York City. R-1496.

TOOL DESIGNER; must be first class tool, jig and fixture designer; will also be required to do some machine tool designing; prefer a man with technical education, and one capable of developing into a production engineer. Location Ohio. R-1499.

RECENT M. E. GRADUATES from recognized engineering schools to begin work in the research department of a concern manufacturing drying machinery; and to become ultimately connected with the sales force. Two openings. Location East. R-1500.

HYDRAULIC ENGINEER; to sell hydraulic presses; must have had extensive experience in hydraulic engineering, and be used to heavy machinery; must be acquainted in Pittsburgh District. Location Pennsylvania. R-1501.

MECHANICAL DESIGNER fully acquainted with machine shop and foundry practice; preferably man having had experience in the design of chemical machinery. Location New York City. R-1502.

CHIEF ENGINEER; highly skilled man, over 38 years of age, capable of designing machinery, jigs, fixtures, small tools, etc., is wanted to take charge of engineering department of large manufacturing concern; must possess executive ability, tact and diplomacy and be able to accomplish results. State age, education and experience in detail and salary expected. Location East. R-1503.

COMBUSTION ENGINEER; young mechanical engineer experienced in power plant efficiency; must be able to make recommendations on fuel economy. Plant uses about a thousand tons of coal a day. Location Ohio. R-1504.

RECENT M. E. GRADUATE with broad vision, and preferably with some experience on automatic machinery for research and development work. Good future. R-1505.

CHIEF DRAFTSMAN and engineer desired by a manufacturer of power plant specialties. Location Middle West. R-1507.

ESTIMATOR AND DRAFTSMAN with extensive experience in heating and ventilating work. Location New York City. R-1509.

CONSTRUCTION ENGINEER with architectural experience to inspect and supervise the erection of several welfare buildings in an industrial plant. After this four to six months' work is completed there is a chance for promotion into the organization if the man proves himself worthy. Location East. R-1510.

PRODUCTION MANAGER; young engineer, preferably mechanical, with some metallurgical experience to act as production manager. Must be of the executive type, and possess good personality; preference will be given to man with a varied commercial experience. Location New England. Salary depends on man. R-1515.

MECHANICAL ENGINEER experienced in pyrometry for position with a large manufacturing concern. Location Pennsylvania. R-1517.

MECHANICAL DRAFTSMAN capable to work under supervision. The work will consist of revising building plans, making layouts for machinery installations, piping layouts, plans for building additions, etc. Applicant will be expected to be able to go out through the plant and take measurements such as location of shafts, speed of pulleys, etc., and complete this work with only general supervision. Location South Dakota. R-1522.

LUBRICATION ENGINEER to advise the correct use of lubrication of the oils, greases, etc., for a copper refining plant employing 1500 men. Considerable amount of mechanical equipment including motors, generators, cranes, rolling stock, blowing engines, etc. Man must be able to develop system of inspection so as to improve qualities of materials purchased each year and their methods of application, so as to result in saving on machine repairs. Man must be somewhat trained in chemistry, in order to write oil specifications and intelligently interpret results of tests in order to see whether oils check up to requirements. Location New Jersey. R-1525.

SHOP FOREMAN to act as instructor. Must have had considerable experience in automobile machinery in order to enable him to take complete charge of shop. Location Michigan. R-1527.

CHIEF ENGINEER to take charge of engineering department and drafting room. Thorough experience in modern methods employed in elevating, conveying and handling of all kinds of material, and designing of the machinery used for such purposes; also a thorough knowledge of the machinery, and of its application to the mechanical transmission of power. Location California. Salary depends upon man. R-1529.

SALES ENGINEER; high grade man to handle a line of dredging machinery. Location Pennsylvania. R-1530.

INDUSTRIAL ENGINEER; young graduate mechanical engineer with one or two years' experience in industrial plant work; must be able to assist in the installation and improvement of plant operating methods. R-1531.

MECHANICAL DRAWING INSTRUCTOR; young college graduate with some experience in teaching mechanical drawing and descriptive geometry, for position with southern University. Location Texas. R-1536.

DRAFTSMAN experienced on boiler and power house work; some estimating experience de-

sired. Three or four openings. Location New Jersey. R-1538.

TIME STUDY MAN; young technical graduate, preferably M. E. for position as time study and rate setting engineer. Location New York State. R-1539.

MACHINE TOOL DESIGNER, thoroughly experienced for position as assistant to chief engineer and head of the drafting room, and designing force of a prominent machine tool concern in New England. Experience on milling machines and special production machines preferred. State age and give full particulars of past experience, familiarity with fixtures and tool work, if any, and salary desired. Only experienced men need apply. R-1545.

MECHANICAL ENGINEER with tool and jig experience on tractors. Location Iowa. R-1549.

ENGINEER thoroughly familiar with distilling, evaporating and drying machinery. Must be capable of taking charge of entire evaporator department including engineering and selling. Location New Jersey. R-1550.

YOUNG ENGINEER with about 3 years' practical experience in construction work to become assistant engineer. Will be put through a course of training lasting several months. R-1553.

YOUNG ENGINEER with about two or three years' practical experience for study on special machinery. After course of training, will travel around the world as demonstrator, erector, and salesman. Personality of man big factor. R-1554.

MECHANICAL DRAFTSMAN for detailing and designing automatic machinery. Location Brooklyn. R-1555.

RECENT M. E. GRADUATE for work in steam power plant. Will have to check, test and generally look after the various gages and instruments around the plant and also make various tests on plant equipment. Will have to look after plant records and do some clerical work. Offers a splendid opportunity to obtain practical power plant experience. Location West Virginia. R-1558.

ASSISTANT INSTRUCTOR; recent technical graduate for position as assistant instructor in mathematics and surveying and possible descriptive geometry. Location New York State. R-1559.

STRUCTURAL STEEL DRAFTSMAN for work in Cuba; must be thoroughly experienced. New York interview. R-1561.

MECHANICAL DESIGNER; young mechanical engineer with two to three years' experience as designer and draftsman. Should understand building construction and be acquainted with labor saving machinery and plant layouts. Location South. R-1562.

WORKS ENGINEER with practical technical and administrative training, especially in connection with sugar mill machinery. Thorough knowledge of Spanish required, as the engineers, laborers, etc., with whom he will come in contact are Spanish. Location Cuba. R-1563.

EXPERIMENTAL DRAFTSMAN familiar with small automatic mechanisms principally those produced in large quantities by punch press methods, such as adding machines or typewriters. Location New York City. R-1566.

MECHANICAL DRAFTSMAN with 3 to 5 years' experience on electrical apparatus of small intricate nature. Location New York City. R-1567.

TOOL DESIGNER with about 3 years' experience, a punch and die specialist on small light work desired. Location New York City. R-1568.

SWITCHBOARD DRAFTSMAN accustomed to switchboard layout and design. Location New York City. R-1569.

PATENT DRAFTSMAN with at least 2 years' experience on the perspective rendering of

small automatic machinery. Location New York City. R-1570.

WORKS ENGINEER to take over a complete organization of a large factory and handle same without friction with the several departments; must have had several years' experience as works engineer or master mechanic with large industrial plant; and be about 35 years old. R-1572.

DESIGNER familiar with hydraulic work and capable of going ahead with detail and design work without supervision. Location Pennsylvania. R-1575.

DESIGNING ENGINEER capable of designing hydro extractors used in laundries, woolen mills, sugar plants, etc., and be thoroughly competent to handle this line of machinery entirely, doing the designing and all engineering work connected with it. Location Ohio. R-1579.

COLD STORAGE ENGINEER capable of laying out piping and taking care of construction for cold storage buildings. Location New Jersey. R-1580.

ENGINEER to design mining machinery, including electric hoists, for large Canadian manufacturer. State education, experience and salary expected. R-1589.

INSTRUMENT REPAIRMAN (ELECTRICAL) wanted for the Panama Canal—\$197.60 month. Must be capable of testing, repairing and installing all types of Watt-hour meters, and indicating and curve drawing instruments, both alternating and direct current in portable and switchboard types. Also instrument maker, \$1.05 hour, thoroughly experienced on engineering instruments. Must be American citizens, final papers, under 50 years of age, in good health. Free steamship transportation from New York or New Orleans, wages beginning date of sailing. Write "Chief of Office, The Panama Canal, Washington, D. C."

MACHINE TOOL SALESMAN thoroughly experienced in every branch of the machine tool business. Must have had actual selling experience of at least five years. Position open in Philadelphia territory. Good opportunity for the right man. R-1590.

POSITIONS AVAILABLE

MACHINE SHOP AND PRESS MANUFACTURING EXECUTIVE and general superintendent. Must have good mechanical judgment and ability to carry through quantity production from planning and routing system already in operation. Position carries authority over all departments. Definite information tabulated concerning production. Must be a leader of men to properly handle labor for maximum production. Location Eastern Massachusetts. R-1591.

SALES ENGINEER. An excellent opening for a high class energetic sales engineer with initiative and good address. One who has had drawing room and designing experience in both structural and mechanical work preferred. Must be thoroughly posted in water tube boiler and combustion work. R-1592.

SALES ENGINEER to handle a line of furnace specialties in the Middle West. Prefer man familiar with furnace and boiler construction and operation. Salary and commission. Excellent opportunity. Write stating age, experience, etc. R-1606.

MEN AVAILABLE

Only members of the Society are listed in the published notices of this section. Copy for notices should be on hand by the 12th of the month, and the form of notice should be such that the initial words indicate the classification. Notices are not repeated in consecutive issues.

MECHANICAL ENGINEER, Worcester Polytechnic Institute graduate, age 27, with three years' experience in shop and drafting room. Prefer position as assistant to executive, but would consider other jobs offering opportunities for advancement. Ensign in the Naval Reserves, recently placed on inactive duty; married. Eastern location preferred. A-844.

MAINTENANCE OR DESIGNING ENGINEER, Cornell University; five years' experience in chemical and industrial machinery, desires position in the Far East or South America. A-1111.

YOUNG ENGINEER, American, age 24, with two years' experience, including shop, drafting, and production, desires position with industrial, commercial, or engineering concern, in technical or sales capacity; knowledge of German, some French; good correspondent; location abroad not objectionable. A-1739.

TECHNICAL ASSISTANT TO PRESIDENT, with exceptional experience in design and factory management as well as knowledge of salesmanship, advertising and accounting. A-2079.

SALES OR EXECUTIVE position wanted by mechanical engineer with degree and four years' varied experience in production and selling; also with good export knowledge. Available after September 1st. New York vicinity preferred. A-2766.

SUPERINTENDING ENGINEER OR ASSISTANT TO PRESIDENT, technical graduate; 19 years' broad experience in general mechanical engineering and practice; artificial refrigeration, air conditioning, power plants, refrigerating and ice making plants, packing house practice; also experienced in erection and design; successful experience in handling office and other help; best of references. Age 40; married; minimum salary \$300 per month. A-3088.

SUPERINTENDENT OR MANAGER OF WORKS, involving construction, equipment, maintenance, production, development, or research. Technically trained in addition to being a practical mechanic. Exceptional ability for planning and working out large enterprises. Twenty years' extensive business experience, in this and other countries, along the following lines: shops, foundries, mills, industrial and power plants, special and rapid duplicate production, small, medium and heavy work. Working knowledge of Spanish. Live, progressive and practical leader obtaining the best from men and equipment by tact and common sense methods. Dependable habits, strong influential personality. Desires to connect with reputable party in need of exceptional service, with corresponding compensation. A-3449.

MANAGER OR GENERAL SUPERINTENDENT. Recently discharged officer of A.E.F., graduate engineer; 20 years' experience as practical mechanic, master mechanic, superintendent and general manager. Familiar with all details of iron and brass foundries; machine, carpenter, pattern, and forge shops; tool rooms and power plants, cost keeping and office work, and a successful executive. A-4189.

ENGAGEMENT WANTED AS CHIEF DRAFTSMAN, or chief engineer, on industrial plant construction, extension or maintenance. Experienced in several branches of engineering, budget systems and unit-cost keeping. Good executive; 18 years' practical experience. Can secure skilled technical assistants. Excellent record; many references. A-4509.

ENGINEER OF TESTS AND COMBUSTION ENGINEER. Stevens 1915. Three years' experience in general steam power plant betterment work; testing of all mechanical power plant apparatus and analysis of such tests to standardize operating conditions and improve efficiency. Special emphasis placed in boiler room economy work. At present employed. Location East or Middle West. A-4511.

PULVERIZED FUEL ENGINEER; age, 31, ex-army officer, desires position as chief engineer; 6 years' experience in designing, erecting, testing and operating all kinds of pulverizing, conveying and burning equipment for locomotives, power plant and metallurgical work, using all kinds of lignite, bituminous and anthracite coals. A-4568.

MECHANICAL ENGINEER, M.I.T. graduate, 32 years of age, married, recently released from the army, desires position in Massachusetts, preferably near Boston. Extensive experience in the maintenance of industrial equipment and in manufacturing. Salary to start, \$3000. A-4578.

TECHNICAL GRADUATE, age 32, married, 6 years machinist, 2 years designer, 1 year superintendent, 2½ years industrial and mechanical engineer, thoroughly familiar with modern methods of organization, management and shop practice, desires connection with progressive concern. Location preferred, Middle West. Good executive. Salary \$4200. A-4615.

SALES ENGINEER, thoroughly familiar with centrifugal pumps, design, tests, operation, and estimating, having some sales experience, wishes to enter the sales field with a reliable organization. Eastern location preferred. A-4616.

FACTORY EXECUTIVE with 18 years of comprehensive designing and engineering experience with several prominent concerns, principally in steam power plant machinery including turbines, desires to make permanent connection with modern and progressive organization. At present employed. Salary commensurate with responsibility. A-4617.

MECHANICAL ENGINEER. Technical graduate; post-graduate course at M.I.T.; 33 years of age; married. Two years' general engineering experience; 4 years in experimental and development work on airplanes; 6 years in experimental investigation of, and reports on, various appliances and systems including safety devices and oxy-acetylene welding and cutting apparatus; desires position with engineering or industrial concern. Chicago or vicinity preferred. Minimum salary \$3000. A-4618.

MASTER MECHANIC for 22 years in large cotton mill in the East desires change to similar position or to a position covering installation and repairs of machinery. Location preferably in the East. A-4619.

HEATING, VENTILATING AND AIR CONDITIONING ENGINEER, technical graduate and married, desires position as assistant to chief engineer, large manufacturing corporation. At present in charge of engineering on work totaling \$400,000; supervising reports, computations, design, specifications, estimates, purchase of equipment and installation. Can relieve chief engineer of the heating problem entirely. Salary \$350 per month. A-4620.

ENGINEER EXECUTIVE; age 38, mechanical engineering graduate; experience in teaching practically all subjects in mechanical course as instructor to full professor; 8 years' practical work in power plant design, reinforced concrete, factory layout, machine design, and construction; desires position as engineer, assistant to superintendent, chief executive, or sales manager; at present employed, but available on reasonable notice. West or Middle West preferred. A-4621.

WORKS OR CONSTRUCTION ENGINEER open for engagement in near future; 14 years' experience in field and office on plant extension and improvement work, building construction, machine installation and maintenance; experience covers a broad field in civil and mechanical work on design, specifications, erection and maintenance; in responsible charge of work 10 years. Age 37 years. Good health. Would consider production work. A-4622.

SHIP YARD EXECUTIVE, engineer, age 36, with 12 years' experience in marine construction, both hull and machinery installation on naval and commercial type vessels, has held positions of chief engineer and yard superintendent. Similar position desired. A-4623.

INDUSTRIAL ENGINEER, age 30 years, technical graduate; 2 years' experience on scheduling, routing, time study, planning, production, and cost accounting; 5 years on heavy machinery, industrial plants, power plants, heating and ventilating work, estimating and specifications; with present firm 2 years; desires change with better prospects for advancement. A-4624.

MECHANICAL AND METALLURGICAL ENGINEER; over 20 years' experience in large steel works, designing and erecting melting and heating furnaces; thorough knowledge of metallurgy, and heat treatment; no objection to sales. A-4625.

MECHANICAL OR PRODUCTION SUPERINTENDENT; 15 years' experience in production and engineering work, now employed, will be open for engagement September 15. A-4626.

ENGINEERING EXECUTIVE; graduate mechanical engineer, age 35; 8 years' experience with Pennsylvania Railroad on special technical investigations, shop installations and management, purchase of machinery, etc.; 2 years in charge Chicago office for steel company; 1½ years with Ordnance Department, U.S.A., charge of engineering and process inspection on contract involving millions. Open for engagement now, location immaterial. A-3728.

YOUNG SALES EXECUTIVE now holding excellent position desires to change for personal reasons. Is well versed in costs and production of steel products in a jobbing business as well as a standard product business. Will consider position in managerial capacity. Married. Cornell mechanical engineer. Available after thirty days' notice. A-4627.

PRODUCTION ENGINEER OR ASSISTANT SUPERINTENDENT; age 33; graduate Stevens Institute; specialized on methods of production, planning, time study and costs for last 8 years; 4 years of general shop and design experience previous to specializing on production work. At present employed. Salary \$3600 to \$4000. Location New York City or vicinity. A-3221.

POSITION AS ASSISTANT ENGINEER OR ASSISTANT TO WORKS MANAGER desired by technical graduate, age 28; 4 years' experience in general engineering, including gas distribution, gas works operation, total production, machine shop planning and production. Experience and best results obtained in handling records and reports. At present employed. Married, and family. Minimum salary \$2500 per year. Philadelphia location necessary. A-4639.

SALES ENGINEER OR ASSISTANT MANAGER; technical graduate, 1914, connected with Gas Defense Division of War Department as production and inspection consultant; 4 years as assistant to consulting engineers for large street railways, power plant operation, etc.; age 28. Salary \$2800 to \$3000. A-1248.

MECHANICAL ENGINEER, graduate, 6 years' experience in manufacture of interchangeable parts, including one year building of heavy artillery; thorough organizer, well versed in modern methods of plant management; planning, production, costs, and sales; desires connection with large progressive concern. A-4087.

WORKS MANAGER OR EXECUTIVE ENGINEER; technical graduate; 18 years' active experience, past 10 years in executive charge as works engineer, mechanical superintendent of large industrial plants. Good executive, familiar with general accounting, plant efficiency and business methods as applied to industrial plant operations. A-4651.

ELECTRICAL ENGINEERING GRADUATE; age 30, single, desires permanent location with chance for advancement; 8 years' experience, mostly mechanical, in steam turbine operation, test and installation; also in compressed air; familiar with iron and steel industry. Salary \$3000. Can handle men. Employed at present. A-4650.

SALES AGENCIES WANTED. Technical graduate, with over 20 years' selling, construction and operating experience and having unusually wide acquaintanceship among public utility operators, engineers and general contractors, desires to negotiate with manufacturers of machinery and electrical equipment to handle sales and distribution if desired, in East and for export trade. Headquarters New York. A-1370.

COMBUSTION ENGINEER; technical graduate; experienced in the maintenance and operation of large power plants, economical generation and distribution of steam power and process work, and testing and efficiency reports, desires position with large paper or chemical company as combustion engineer or power superintendent. Age 26; married; minimum salary \$2700. Location East or Middle West. A-4510.

SALES ENGINEER, technical graduate, age 29, married; experience in general electric test; power plant testing and operating in large central stations in and near New York City; and in electrical apparatus and power stations on steam railroad; wishes to enter sales work with some firm in or near New York City where the foregoing experience will be valuable. Best of references. Available on short notice. A-3268.

MECHANICAL ENGINEER; technical graduate; 3 years' experience constructing, testing, and operating steam machinery, both marine and stationary; age 24, married; desires sales engineering position.

MECHANICAL AND ELECTRICAL ENGINEER; technical graduate, age 36, married; experienced in the purchase of materials, design, construction, operation and maintenance of power plants; also in combustion engineering in connection with gas producers and fuel oil heat treating furnaces. At present employed as power engineer for a large steel company. Salary commensurate with responsibilities. A-4652.

CAPTAIN OF ENGINEERS, Coast Guard, qualified Naval Aviator, 10 years' engineering experience, commanding Naval Air Station during war, would like connection with aviation or automobile concern as engineer or executive. Salary \$4000. A-4668.

PLANNING AND MAINTENANCE ENGINEER. First Lieutenant, Ordnance Department; graduate of M.I.T. in mechanical engineering; age 27. Two years' experience in industrial plant layout work, planning, maintenance and improvement of production machinery and powerhouse equipment; 2 years with Engineering Division, Ordnance Department, on development work with machine guns and small arms. Varied experience at all of small-arms ammunition and machine gun plants in country. Position desired with industrial concern requiring planning, maintenance, development or research work. New York City or vicinity preferred. Salary \$2400. Available immediately. A-4368.

MECHANICAL ENGINEER, Cornell graduate, married; 5 years' responsible experience in production work in machine shops, and extensive experience adapting scientific methods of management and installation of premium rates. At present employed, in charge of experimental department of large concern. Prefer location in Eastern section. Minimum salary \$5000. A-4669.

FOREIGN TRADE. Executive of ability and aggressiveness; technical graduate, speaking five languages, with a varied experience in modern lines of management and production; making investigations of trade possibilities and requirements in Europe and the Latin Americas; establishing agencies and directing their activities, is desirous of making permanent connection with a large corporation contemplating the establishment of foreign relations. A-2144.

WORKS MANAGER OR PRODUCTION MANAGER. Graduate M.E. from Stevens Institute of Technology; thoroughly versed in scientific management, cost-production methods, planning, scheduling and dispatching; wide experience in manufacturing lines. Would like executive position with well-organized concern. Available at once. A-3248.

ASSISTANT PRODUCTION MANAGER, age 29, married, with 8 years' varied experience in testing, inspection and sales work in power plant and sub-station fields desires engagement with growing and progressive concern. A-429.

MECHANICAL ENGINEER; technical graduate; age 28; desires position along executive lines, on production; experienced in development of design and manufacture of automatic machinery. Thoroughly familiar with all branches of shop practice. Minimum salary, \$2600. A-4052.

WORKS MANAGER, and manufacturing engineer, American, age 36, unusually qualified in highest grade manufacture of standardized heavy machine equipment, precision machine tools, tractors, and textile machinery, desires a proposition carrying complete control of a manufacturing plant, with a salary not less than \$10,000. A-1054.

TECHNICAL GRADUATE, Naval Reserve Officer, age 25, desires connection with manufacturing concern where executive, engineering and business ability can be exercised; 4 years' varied experience in general engineering work in connection with steel plant operation, manufacturing and office work. Available on short notice. Excellent references. A-3277.

RECENT STEVENS GRADUATE, just out of naval service, desires position as power plant engineer or experimental engineer with some industrial concern. Has had 18 months' experience in steam engineering. A-4682.

INDUSTRIAL OR EFFICIENCY ENGINEER, Columbia graduate; 4 years' experience on construction work; in charge of electrical and mechanical equipment, in all departments of a large electric light and power company; deeply interested in industrial problems. At present pursuing an extension business course. A-247.

MECHANICAL ENGINEER, age 38; last 4 years manager sulphuric acid plant, desires connection in Philadelphia or vicinity. Technical graduate. Other experience in water works, fertilizer factories, coal mines, shops and cement plants as designer and superintendent of construction. A-4698.

MECHANICAL ENGINEER, age 24, technical graduate, 2 years' practical shop, drafting room, and engineering experience, desires position with future as mechanical engineer or in engineering sales. Location Pennsylvania preferably. A-2819.

MECHANICAL AND ELECTRICAL ENGINEER. M.I.T. graduate desires position as production manager or efficiency engineer with manufacturing company; had 6 years' experience in manufacturing field; thoroughly familiar with scientific method of management and modern machine shop practices. A-4699.

TECHNICAL GRADUATE, 34 years of age, with broad experience as designer, erecting engineer, master mechanic and production manager in several branches of industry, would like to make a connection with a large horticultural undertaking, either in this country or abroad, where the services of a capable technical man are needed. A-3731.

MECHANICAL ENGINEER, technical graduate, age 25, three years' experience in the management of excavating machinery. At present employed but desires to make a change to position which offers greater opportunity for advancement. Location in South or West preferred, but will consider position in West Indies or South America. A-4700.

SPECIALIST, mechanical and electrical, graduate M.E. with years of experience in engineering office and laboratory lines of work; designs, estimates, researches and investigations, tests, reports, technical writing, editorial work; available two days weekly, Chicago and vicinity. A-4701.

SALES ENGINEER OR ASSISTANT TO EXECUTIVE; technical graduate; age 25, with 4 years' experience in building construction and installation of mechanical equipment. Recently released from Government service; desires to locate in New York district. Would consider moderate salary to start in position with a future. A-1581.

EXECUTIVE OR PRODUCTION ENGINEER; age 37, married; 17 years' experience in manufacturing, as foreman, designer, and chief draftsman on special machinery, tools, gages, jigs, and fixtures; past 6 years on design production and inspection of rifle and machine gun parts. A-4702.

CHEMICAL PLANT EXPERT; specialized in the requirements peculiar to the chemical industry. Experience in the development of plant from results of chemical research; also in construction, maintenance, and operation; desires a position with opportunity for advancement. A-4703.

\$25,000-\$100,000 CAPITAL available for the development of a manufacturing proposition in the brass or steel industry provided that the stock control rests with two engineers furnishing the capital and that they take an active part in the management. For further information apply to Box E. S. E. B. No. 10.

EXECUTIVE ENGINEER, technical graduate, 33 years old, with wide manufacturing experience; has served overseas; wishes to join with someone, or to know of a company already established that may be in need of rehabilitation, additional funds or one which is expanding. Rigid investigation required and given. New York preferred. A-4735.

MECHANICAL ENGINEER, army officer, age 27; graduate Penna State College; 9 years' railroad experience; 2 years' service in France.

principally liaison engineer work; speaks French. Desires to represent mechanical firm in France, Belgium or Switzerland. A-4713.

MECHANICAL ENGINEER FOR INDUSTRIAL PLANTS. Desires position as engineer in charge of maintenance, improvements, extensions, and construction of new plants; experience includes design of boilers, tanks, etc.; handling machinery; layout of machine shops, and power transmission machinery. Formerly U. S. A. Engineer Officer. A-1457.

PRODUCTION SUPERINTENDENT; 20 years' experience in designing and operating automatic machinery and as production superintendent in large factory requiring great accuracy in its product. Specialty, introducing new methods to produce work to gage and for assembling by unskilled help. Nearly three years in war contract work. Experienced in designing and operating machinery for making sapphire cutting tools. Desires personal control of the mechanical methods for producing product. Minimum salary, \$5,000. A-3752.

CANDIDATES FOR MEMBERSHIP

TO BE VOTED ON AFTER OCT. 18

BELOW is a list of candidates who have filed applications since the date of the last issue of **MECHANICAL ENGINEERING**. These are arranged geographically. Applications for change of grading are also posted. The total number of applications received and listed below is 188.

The Membership Committee, and in turn the Council, urge the

members to scrutinize this list with care and advise the Secretary promptly of any objections to the candidates posted. All correspondence in this regard is strictly confidential. Unless objection is made to any of the candidates by Oct. 18, and provided satisfactory replies have been received from the required number of references, they will be balloted upon by the Council.

NEW APPLICATIONS

California

CUMMINGS, FRANK S., Mechanical Engineer, South California Edison Co., Los Angeles
GUNTHER, ERNEST, Sheet Metal Worker, California Corrugated Culvert Co., West Berkeley
LAUGHLIN, HOMER, JR., President, Laughlin Fruit Refiners, Inc., Los Angeles
SHADE, NEVIN R., Draftsman, General Petroleum Corp., Vernon
WICHMAN, ARTHUR F., Engineer and Salesman, Berger & Carter Co., San Francisco

KENTISH-RANKIN, IVOR L., Technical and Associate Editor, "Electrical Review," Chicago

MOHR, WILLIAM J., Treasurer, John Mohr & Sons, Chicago
POHLMANN, EDWARD C., Assistant Editor, American Garage & Auto Dealer, Chicago
SHACKLETON, ROY, General Superintendent, Green & Sons Co., Chicago
SLOCOMB, GEORGE H., Works Engineer, Aluminum Ore Co., East St. Louis

Connecticut

HALLAM, MARK J., Engineer, Bridgeport Brass Company, Bridgeport
HENRY, JOHN M., Research Engineer, Pratt & Whitney Co., Hartford
JOHNSTON, HAMPTON W., Master Mechanic, Bridgeport Brass Co., Bridgeport
MCILWAIN, ROBERT W., Fixture & Tool Designer, Nash Engineering Company, South Norwalk

FRANCE, EDGAR G., General Superintendent, The Singer Mfg. Company, South Bend
WALKER, EDWIN M., General Manager, Indianapolis & Eastern Traction Co., Terre Haute

Iowa

MADSEN, SERN, Mechanical Engineer, Curtis Brothers & Co., Clinton

Kansas

PETTY, EARL, Assistant Supervising Engineer, Empire Gas & Fuel Co., El Dorado
STONE, JOHN R., Mechanical Engineer, War Department, United States Disciplinary Barracks, Fort Leavenworth

Delaware

TILDEN, PHILIP VAN A., Junior Engineer, E. I. du Pont de Nemours & Co., Wilmington

Louisiana

BLACK, JAMES R., Lieutenant, U.S.N.R.F., U.S.S. "Illinois," Engineering Duty, New Orleans
DROMGOOL, PETER J., Superintendent Engineer, Pan American Petroleum & Transport Co., New Orleans

District of Columbia

CLEARE, WILLIAM M., Assistant Physicist, Bureau of Standards, Washington
FULLMER, IRVAN H., Assistant Physicist, Bureau of Standards, Washington
HOCH, GEORGE W., Inspector of Mechanical and Electrical Engineering of the Supervising Architect, Treasury Department, Washington

Massachusetts

BENNETT, COOLIDGE J., Mechanical Superintendent, Bigelow Hartford Carpet Co., Lowell
BROOKS, PHELIPS N., Production Engineering, Ashton Valve Co., Cambridge
DAVIS, HARVEY N., Professor of Mechanical Engineering, Harvard University, Cambridge
DEXTER, BAYARD P., Treasurer and Manager, Leavitt Machine Co., Orange
GRAMMER, REYNOLD A., Mechanical Draftsman, Stone & Webster, Boston
PRESTON, SOLON F., Plant Engineer, Hendee Mfg. Co., Springfield
PRINCE, WARREN F., Assistant Master Mechanic, Saco Lowell Shops, Lowell
SHUTE, FREDERICK W., Chief Engineer, Wilton Tool & Mfg. Co., Boston
SITTINGER, CARL J., Mechanical and Electrical Engineer, John A. Stevens, Lowell
SOMERS, RAY L., Plant Engineer, Greenfield Tap & Die Corp., Greenfield
WAGNER, OSCAR A., Chief Draftsman, Wilton Tool & Mfg. Co., Lynn
WILLS, MARMADUKE M., Shop Engineer, Manning, Maxwell & Moore, Inc., Fitchburg

Illinois

BLISS, HAROLD D., Chief Mechanical Engineer, Morris & Co., Chicago
BORN, WILLIAM G., Chief Engineer, John Mohr & Sons, Chicago
DEARBORN, ARTHUR S., Chief Mechanical Engineer, Crossland-Pfaff Engineering Laboratories, Chicago
EICHORN, HARRY L., Chief Draftsman, The Payson Mfg. Co., Chicago
HILL, PHILLIP S., Engineering Department, Isko Co., Chicago
HUDSON, FINN B. S., Consulting Engineer, Chicago

Michigan

JOHNSON, RICHARD S., Factory Manager, Smalley General Co., Bay City
LOVELL, THOMAS S., Designing Engineer,

Power Construction Department, Ford Motor Co., Highland Park
PASINSKI, WALTER J., Engineering Manager, Burroughs Adding Machine Co., Detroit
TONKIN, WILLIAM, Mechanical Structural Designer and Draftsman, Quincy Smelting Works, Hancock

Minnesota

BAKER, GEORGE E., Draftsman, Clyde Iron Works, Duluth
RUEMELIN, RICHARD, Chief Mechanical Engineer, Twin City Forge & Fdry. Co., Stillwater

Missouri

FRANKENHOFF, CHARLES A., Resident and Designing Engineer, Black & Veatch, Kansas City
KEETH, JACOB A., Detail Engineer, Kansas City Light and Power Co., Kansas City
MALL, IVOR O., Draftsman, Harrington, Howard & Ash, Kansas City

New Hampshire

WILLIAMS, EDGAR H., Superintendent of Construction and Master Joiner, Atlantic Corp., Portsmouth

New Jersey

BARRON, JACOB T., General Superintendent of Production, Public Service Electric Co., Newark
BOCKIUS, LOGAN, Special Engineer, Roessler & Hasslacher Chemical Company, Perth Amboy

CABLITZ, FRED G., Marine Engineer, U. S. Emergency Fleet Corporation, Port Newark
JENIK, LOUIS A., Acting Superintendent, Small Motor Department, Crocker, Wheeler Electric Co., Ampere
KILLOUGH, WALTON B., Resident Engineer, Standard Oil Company, Elizabeth
LESLIE, S. INGLIS, Secretary and Treasurer, The Leslie Co., Lyndhurst
PERAGALLO, JOSEPH J., Draftsman, Babcock & Wilcox Co., Bayonne
SCHEIDL, HENRY, Mechanical Engineer, Singer Mfg. Co., Elizabethport
SMITH, E. BURTON, Manager, Maintenance International Arms & Fuze Co., Bloomfield
WHITNEY, WILLIAM O., Assistant Manager, Brunswick Refining Co., New Brunswick

New York

AITKEN, GEORGE T., Sales Manager, Frontier Chuck & Tool Co., Buffalo
BERCHEM, ALFRED, Master Mechanic, Breakstone Brothers, Inc., Walton
BERDGE, EDWARD A., Tool Engineer, Sperry Gyroscope Co., Brooklyn
CAIROLE, CARLETON S., Chief Draftsman, National Conduit & Cable Company, Hastings-on-Hudson
CHARLES, PHILIP S., Major, Ordnance Department, U.S.A., Rochester
CHUBB, HARRY W., Tool Designer, Sperry Gyroscope Co., Brooklyn
DIETRICHSON, WILLIAM F., Designing Engineer, American Car & Foundry Co., New York

DOUGHERTY, PROCTOR L., Manager, Washington, D. C., Otis Elevator Co., New York
ELLINSKY, LEONID I., Mechanical Engineer, Member of Russian Mission of Ways of Communication, New York
FLECK, ANTHONY G., Chief Engineer, Pneumatic Concrete Machinery Co., New York
FORGEY, FREDERICK A., Consulting Engineer (Re-election), New York
FOSTER, ANDREW J., Valuation Engineer, Electric Bond & Share Company, New York
GARNER, ENOCH F., Instructor Machine Design, Cornell University, Ithaca
HAMMARSTROM, ERIK, Mechanical Engineer, West Virginia Pulp & Paper Co., New York
HEYMAN, NICHOLAS, Instructor, Machine Design, Pratt Institute, Brooklyn
HILDENBERGER, THOMAS A. D., Manager, Lubricating Department, Ohio Cities Gas Company, New York
KARGE, MOSWELL R., General Manager, Karge Baker Corp., Phoenix
KLITENICK, MARK, Tool Designer, John Thomson Press Co., Long Island
LANDIN, MAURICE, Junior Electrical Engineer, Public Service Commission, New York
LEARND, GEORGE E., President, Combustion Engineering Corporation, New York
LISTER, FRANCIS E., Engineer, Audiffren Refrigerating Machine Co., New York
LORD, W. M. B., Assistant to Engineer in Charge, Westinghouse, Church, Kerr & Co., New York
LUCE, RICHARD S., Examiner, U. S. Shipping Board Emergency Fleet Corp., New York
MCASLIN, WILLIAM J., Marine Superintendent, M. H. Tracy Steamship Co., Brooklyn
McCORMACK, RAYMOND A., Chief Engineer, Arthur Knapp Engineering Corporation, New York
MC LAUGHLIN, ELWOOD F., Mechanical and Electrical Engineer, General Electric Co., Schenectady
MACDERMOTT, STEWART S., Engineer, Western Electric Co., New York
MACDONALD, WILLIAM F., Tool Engineer, Sperry Gyroscope Co., Brooklyn
MARSH, HARRY S., Chief of Engineering Department, Ford Instrument Co., New York
MILLER, GARRETT E., Mechanical Designer, American Sugar Refinery Co., New York
MONTGOMERY, GEORGE A., Chief Inspector, Ordnance Department, U.S.A., Yonkers
PAFFRATH, HUGO J., Superintendent, John Thomson Press Co., L. I. City
PEYINGHAUS, ROBERT, Shops Superintendent, Wilson Welder & Metals Co.
POPP, J. L. T., Chief Engineer, Dobbie Foundry & Machine Co., Niagara Falls
PUC, VOJTECH, Manager, Waldes & Co., L. I. City
PULLER, OTTO G., Co-Partner, Pullmann Engineering Service, New York
REAGAN, FRANK H., General Manager, Locke Insulator Mfg. Co., Victor
ROSENBERG, SIDNEY, Mechanical Engineer, U. S. Government, War Department, New York
SALMOW, DANIEL, Brooklyn
SCOTT, ABRAHAM L., Assistant Production Routine Engineer, National Conduit & Cable Co., Hastings
SEMMES, GEORGE W., Chief Engineer & Vice-President, Akerlund & Semmes, Inc., New York
SMITH, CHARLES H., Experimental Engineer, Anti-Corrosion Engineering Co., New York
SPAIN, BATT L., Commercial Engineer, General Electric Co., Schenectady
TAYLOR, NEWELL E., Engineer, Sales Department, Ingersoll-Rand Co., New York
WEBER, THEODORE G., Superintendent of Works, Central Union Gas Co., New York
ZETTERGREN, CHARLES, Draftsman, Dwight P. Robinson & Co., Inc., New York
ZIMMERMAN, EDWIN W., Engineering Department, American Trading Company, New York

Ohio

BEAUMONT, FREDERICK R., Designing Engineer, The McKinney Steel Company, Cleveland
BECKER, WAYNE A., Sales Engineer, Ingersoll-Rand Co., Cleveland
BORNSTEIN, JOSEPH, Mechanical Engineer, Penn Piston Ring Co., Cleveland
BRUSSSTAR, BENJAMIN F., Vice President & General Manager, Cleveland Brass & Copper Mills, Inc., Euclid
JONES, HOMER W., Engineer Machine Development, National Carbon Co., Inc., Cleveland

LOGAN, CHARLES F., Designing Engineer, Wellman-Seaver-Morgan Co., Akron
McHENRY, ROY B., General Manager, The Cleveland Planer Co., Cleveland
MARTIN, C. VERNE, Mechanical Engineer, National Supply Co., Toledo
MATTESON, ROBERT D., General Superintendent The John F. Byers Machine Co., Ravenna
PATTERSON, THOMAS, Master Mechanic, The National Tube Co., Lorain
REEDY, CHARLES, President & Engineer, H. J. Reedy Elevator Co., Cincinnati
TALBOT, NELSON S., Dayton Metal Products Co., Dayton
THOMPSON, HORACE W., District Manager, Bardons & Oliver, Cleveland
WETHERILL, ROBERT, JR., Designing Draftsman & Assistant Engineer, The Wellman, Seaver Morgan Co., Cleveland

Oklahoma

COYLE, ROBERT M., Superintendent, Bartlesville Division, Mid-Co. Gasoline Co., Bartlesville

Oregon

MATTER, GUSTAVE O., Plant Engineer & Superintendent Machine Construction, Concrete Pipe Co., Portland

Pennsylvania

ARGYLE, WILLIAM R., Assistant Physicist, U. S. Bureau of Mines, Pittsburgh
BRIDGES, JAMES W., Instructor U. S. Shipping Board, Carnegie Institute of Technology, Pittsburgh
BROUGHTON, HAROLD E., Maintenance Engineer, Trojan Powder Co., Allentown
CABLE, HERBERT W., Tool Designer, Colburn Machine Tool Co., Franklin
CHALKER, ALBERT R., Chief Draftsman, Locomotive Stoker Co., Pittsburgh
DAUGHENBAUGH, LAURENCE W., Examiner, Baldwin Locomotive Works, Philadelphia
DIEHL, AMBROSE N., General Superintendent, Carnegie Steel Co., Duquesne
HARRISON, JEROME G., Engineer, Emergency Fleet Corp., Philadelphia
HILLER, PAUL W., Erecting Foreman, Carbondale Machine Company, Carbondale
HUNT, GEORGE A., Superintendent of Fodge, Savage Arms Corp., Sharon
KATZENMEYER, JOHN A., General Manager, Standard Engineering Co., Ellwood City
MCNAIR, CHARLES, Mechanical Expert, Galena Signal Oil Co., Franklin
MURPHY, DEANE, District Manager of Sales, West Leechburg Steel Co., Pittsburgh

PALMER, ROY C., Draftsman, Pennsylvania Railroad Co., Altoona
SCHWAB, DELMER B., Mechanical Engineer & Chief Draftsman, Bovaird & Seyfang Mfg. Co., Bradford
SMITH, CHARLES R., Instructor of Machinery, Chester High School, Chester
STEIGER, WILLIAM A., Mechanical Engineer, Navy Department, Philadelphia Navy Yard, Philadelphia
TORRENCE, FRANK M., Assistant Professor of Mechanical Engineering, Pennsylvania State College, State College
WALSH, THOMAS A., Safety Engineer, Merchants Ship Building Corp., Harriman
WANNER, EDGAR P., Engine & Turbine Repairman, Midvale Steel & Ordnance Co., Coatesville

Tennessee

GAHAGAN, BENJAMIN W., Superintendent, H. J. Moore, Sweetwater
WARE, A. J. V., Engineer, Memphis Cotton Hull & Fibre Co., Ltd., Memphis

Texas

HILL, HOWARD G., Mechanical Pilot Engineer, Southern Pacific Lines, Houston

Virginia

BREAKELL, JAMES, Chief Engineer, The viscose Co., Roanoke
WEST, JOHN W., JR., Assistant Engineer, State Corporation Commission, Richmond

Wisconsin

BROWN, EDWIN H., Testing Engineer, Allis-Chalmers Mfg. Co., Milwaukee
FLORY, A. C., Manager, Steam Turbine De-

partment, Allis-Chalmers Mfg. Co., Milwaukee
HOTCHKISS, HOWARD C., Assistant Factory Engineer, Wallis Tractor Co., Racine

Canada

BROWN, GEOFFREY C., Chief Time Study & Rate Setting Department, Northern Electric Co., Ltd., Montreal
GREYSON, F. RAYMOND, Chief Draftsman, British America Nickel Corp., Nickelton, Ontario

England

ABRAHAM, FREDERICK H., Technical Assistant Bradford Electricity Department Bradford Corp., Bradford
HEENAN, JOHN W. D., London Manager, Power Specialty Co., London

France

DEANGELIS, MARIUS L., Engineer, Messrs. Thomson Houston Co., Paris

Mexico

SHAW, SILAS F., Superintendent, American Smelting & Refining Co., Charcas, San Luis

Quebec

MILLS, NATHANIEL C., Consulting Engineer, Montreal

CHANGE OF GRADING

PROMOTION FROM ASSOCIATE-MEMBER

Illinois

BELL, ANDREW L., Assistant Manager, Barber Asphalt Paving Co., Madison

Minnesota

ZIMMERMAN, FRANK R., Chief Engineer & Superintendent, National Iron Co., Duluth

New York

MITCHEL, ALBERT H., New York Representative, Taft-Pelre Mfg. Co., New York
SCHEIN, ALEXANDER, Ship Stabilizer Engineer, Sperry Gyroscope Company, Brooklyn

North Carolina

HEYWARD, THEODORE C., Assistant Manager, Thos. B. Whitted, Charlotte

Tennessee

WEIGEL, ALBERT C., Eastern & Export Manager, The Walsh & Weidner Boiler Co., Chattanooga

PROMOTION FROM JUNIOR

California

CONNOR, HERBERT R., Sales Engineer, The Meese & Gottfried Co., San Francisco

Connecticut

ROGERS, FRED E., JR., Sales Engineer, Fafnir Bearing Co., New Britain
STRING, JOSEPH S., Partner, String-Lunn Co., New Haven

District of Columbia

OAKES, CHARLES E., Associate Electrical Engineer, Bureau of Standards, Washington

Massachusetts

LEWIS, ARTHUR L., President, Worcester Steel Products Co., Worcester

Missouri

BUFORD, EDWIN H., Assistant Chief Engineer, Monsanto Chemical Works, St. Louis

New Jersey

HAGERTY, WALTER W., Chief Draftsman, Roessler & Hasslacher Chemical Co., Perth Amboy

New York

BREWER, ALLEN F., Combustion Engineer, The Texas Co., New York
HILL, HERBERT M., Mechanical Engineer, Paper Utilities Corp., New York

KEENE, ALBERT R., Chief Engineer, Doehler Die Casting Co., Brooklyn
MULLER, RAYMOND W., Service Engineer, Walter Kidde & Co., New York

Pennsylvania

BARTON, CHARLES R., Engineer, Edgewater Steel Co., Pittsburgh
PENNELL, SAMUEL H., Assistant Manager, Ballinger & Perrot, Philadelphia
SIBSON, HORACE E., Engineer of Sales, Harrison Safety Boiler Works, Philadelphia

SUMMARY

New Applications	168
Change of Grading	
Promotion from Associate-Member	16
Promotion from Junior	14
Total	198

SUMMARY SHOWING AVERAGE AGE AND POSITIONS OF APPLICANTS ON BALLOT
CLOSING AUGUST 29, 1919

Average age of applicants	
Members	40
Associates	46
Associate-Members	31
Juniors	25
Chief Engineers	
Construction Engineers	2
Consulting Engineers	
Designers	
Draftsmen	
Chief Draftsmen	
Electrical Engineers	
Estimator	
Executives (Pres., Vice-Pres., Sec'y-Treas., Mgrs.)	
Industrial Engineers	

Instructors	...	1
Master Mechanic	...	1
Mechanical Engineers	...	18
Asst. Mechanical Engineers	...	3
Plant Engineers	...	3
Production Engineers	...	2
Professors	...	2
Asst. Professor	...	1
Research Engineer	...	1
Sales Engineers	...	5
Sales Managers	...	1
Superintendents	...	8
Asst. Superintendents	...	3
Supervisors	...	2
Miscellaneous	...	33
UNITED STATES GOVERNMENT SERVICE		
Major	...	1
Captain	...	2
First Lieutenant	...	3
Ensign	...	1

ADDRESSES OF MEMBERS REQUIRED

Mail recently sent to the following members of the Society has been returned, address unknown. Any information regarding the present location of these members will be appreciated by the Secretary.

ADDRESS DOUBTFUL

Allan, Wm. T.
Allen, W. Harwell
Armstrong, Walter J.
Arnaiz, Walter P.
Atkinson, George K.
Austin, Richard S.
Austrom, Charles A.
Baker, Norman L.
Ballard, Frederick W.
Baumgartner, Arthur A.
Baxter, Henry N.
Beard, Theodore H.
Bechtel, John A.
Benjamin, Merrill G.
Bensammon, Edmond
Benson, Robert F. A.
Bergstrom, H. E.
Bertsch, John C.
Bettis, Wm. J.
Binckes, F. J.
Borden, John M.
Bowman, Robt. B.
Boyd, William C.
Boyer, Frederick Q.
Brady, George S.
Brooke, Wm. Clement
Brown, Edwin H.
Bruff, Chas. L.
Bryan, Artis C.
Buell, Maurice L.
Burns, Herbert A.
Bussey, Chas. C.
Cahill, Anthony M.
Carew, Wm. A.
Carlson, Carl T.
Carpenter, Chas. U.
Chase, Wm. W.
Chadbourne, John L.
Christensen, James C.
Clark, Frank S.
Clark, James G.
Cochrane, Robert B.
Colby, Clyde W.
Compton, Ralph O.
Cook, Henry F.
Corbett, William B.
Cragg, Walter S.
Crowder, Carl G.
Crute, William R.
Curley, Robert S.
Curly, Raymond E.
Davidson, Clarence M.
Dedrick, Benjamin W.
Dietrich, Fred C.
Doron, William H.
Driver, Arthur
Duffy, Owen
Duncan, George W.
Dunton, Philip R.
Duram, Arthur E.
Edwards, Victor E.
Estwing, Ernest O.
Evans, Herbert W.
Eyre, Thomas T.
Flynn, Charles A.
Fritts, Charles E.
French, Edward V.
Fuller, Floyd M.
Galloway, Charles D.
Gants, Elwyn T.
Garrison, W. L.
Gelder, John T.
Gibson, Charles D.
Gildersleeve, Frank M.
Gilliam, Thomas B.
Gladfelter, Herbert S.

Glasgow, Carr L.
Glass, William Clement
Goedkoop, Walter C.
Goldrich, Philip
Gooley, Joseph E.
Guthrie, Robert G.
Haller, Winfield A.
Hamilton, James V.
Hammond, Myram H.
Hammond, Richard
Hawes, Alex. G.
Hargrave, Hugh H.
Hayward, Sterling F.
Henning, Charles F.
Henningson, Louis A.
Henry, George J.
Hobson, Russell B.
Holt, Herbert F.
Hook, James W.
Horton, Charles M.
Horton, Marshall G.
Hubbell, Arthur C.
Hull, Foster J.
Hume, Walter E.
Hunt, Harry B.
Hunt, William F.
Isenberg, Martens H.
Jacobs, Adolph
Jennens, Arthur E.
Johns, Edward F.
Kales, William R.
Kammerhoff, H. H. M.
Kaspar, Joseph J.
Kastler, Edward L.
Keely, Royal R.
Kemp, Francis I.
Kenyon, Alfred L.
Key, James F.
Kraut, Hans B.
La Foun, Alphonse
Lapat, Leopold
Lawrence, Samuel E.
Leary, Frank J.
Leigh, Robert E.
Leonard, Albert P.
LeValley, John R.
Lipsner, Benjamin B.
Loewenstein, L. C.
Long, L. Guy
Ludemann, John E.
Lunn, John A.
Lyon, Howard B.
Lyon, Tracy
McCabe, John C.
McCarte, Alexander J.
McFarlan, Edward
McLean, Alva W.
Macdonald, J. W. F.
Mackie, Daniel M.
Magie, William E.
Maitra, Krishna M.
Marshall, Wm. A.
Mayo, William B.
Mead, Richard R.
Melenky, Jesse G.
Menges, T. C.
Menzin, Abraham L.
Meyncke, George M.
Miltenberger, George K.
Misostow, Henry
Moody, William F.
Morris, John E.
Morrissey, John M.
Morse, Walter R.
Mosman, Ernest
Moulton, Seth A.

Mulliner, Richard H.
Murphy, James A.
Nadler, Harry A.
Nailler, Raymond F.
Nicol, John Oederlin Frederick
Parsons, Frederick A.
Paulson, Peter A.
Picard, J. E.
Pohle, Walter B.
Polk, Anderson
Pollard, Wright
Porter, Finley R.
Pryor, Willard L.
Quinn, L. R.
Ralph, J. J.
Rascovich, M. B.
Real, Geo. F.
Reeve, Sidney A.
Reynolds, Geo. D.
Richards, Arthur
Rigdon, Carl
Riggs, George
Roos, Delmar G.
Royal, James M.
Ruebel, C. A. E.
Ryan, E. F.
Ryder, Earl R.
St. Lawrence, John
Sawyer, Harry S.
Schlitz, Bernard P.
Schreck, H.
Schubart, Frank H.
Schulhoff, Saul
Seaman, Frank W.
Seigle, William R.
Selindh, Herbert S.
Shaffner, Charles R.
Shields, Frank S.
Sibley, Mark M.
Skinner, Ramsey
Slaughter, Benjamin G.
Slocum, Myles S.
Smith, Harry R.
Smith, Preston, M.

Smith, Thomas W.
Squire, Milford B.
Stamer, Frank R.
Stevens, Ray P.
Stevens, William N. (N. Y. C.)
Stimmel, Virgil B.
Stolberg, E. C.
Stovel, Russell W.
Stults, William R.
Sweeney, Morgan L.
Syska, Adolph G.
Talbot, Clifford
Taylor, Cecil H.
Tuomson, John
Tompkins, Harold D.
Trefz, Julius J.
Troth, Howard P.
Turner, Wm. C.
Tuvin, Julius H.
Uehling, Edward
Vallance, Alexander
Van Fleet, Herman
Van Keuren, Edgar B.
Walbridge, Arthur H.
Walsh, Francis S.
Warburton, Robert L.
Warren, William H.
Wartenweiler, Otto
Weston, Samuel C.
Wilbur, Ralston T.
Wilkie, Donald C.
Willard, James A.
Williams, N. N.
Williamson, Charles S.
Wilson, James Aiken
Wilson, James Andrew
Wintzer, Rudolph
Woobank, Wilfred
Wood, Benjamin F.
Wood, Roland T.
Woodward, Hiram W.
Wolfolk, William G.
Yager, John E.
Zimmerman, James J.

ADDRESS UNKNOWN

Anderson, Herbert W.
Ballou, J. Ladd.
Barker, Ernest S.
Behr, Francis J.
Bergstrom, Harry E.
Blank, Bernard
Brown, John W. Jr.
Chapin, Harry A.
Church, F. O.
Clemons, Robt. S.
Cutler, James B.
Drew, William N.
Felker, Geo. F.
Fisher, Robt. R.
Gallaher, Charles W.
Garrett, Seymour S.
Greene, Isaac C.
Haines, Philip G.
Hall, Charles A.
Harmon, Harry T.
Hart, Howard P.
Harvey, Walter O.
Haynes, Charles A.
Heileman, Frank A.
Hite, Hugh D.
Howard, Henry S.
Hughes, James W.
Johnson, Joseph B.
Kinder, J. J. de
Kirsch, James L.
Kugel, H. K.

Lake, Charles W.
Lawrence, Schuyler
Lease, Leonard J.
Lewis, J. Clifford
Lincoln, Howard A.
McLundie, Archibald S.
Macdonald, Howard D.
Marrow, George P.
Matthew, Robert M.
Moore, Charles C.
Moyer, Will D.
Nolan, M. Wm.
Owen, Richard L.
Penney, Charles F.
Randall, John A.
Robb, Charles A.
Rose, David
Sawford, Frank
Schmidt, John D.
Scott, Rossiter S.
Scrugham, James G.
Shaw, Joseph D.
Stickel, C. P.
Sullivan, Frank A.
Thornhill, Theodore W.
Vander Willigen, T. A.
Weakley, Floyd L.
Wheeler, Fred B.
Youngbluth, R. O.
Zach, Louis M.
Zink, Robt. E.